Expansion of the Leaf Vacuum Program Referred Matter 83/2024

Public Works and Engineering





Overview

- On Nov 27, 2024, a public delegation appeared before City Council and requested consideration of being added to the program through expansion of the current limits.
- The report provides three (3) options for Council to consider for expansion of the Leaf Vacuum Program from its current locations of downtown and Churchville be expanded to all mature areas of Ward 2 as well as other mature areas within the City of Brampton.
- Meetings were held with Councillors from each Ward pairing to provide an overview of what staff were to be reporting back on. Feedback was accepted and options within the report were updated.
- The Leaf Vacuum Program is active in the downtown and Churchville areas. The majority of Downtown and Churchville are located within the floodplain, making them significantly more vulnerable to flooding. These areas also feature aging infrastructure and a mature tree canopy which is why they require additional preventative measures such as the Leaf Vacuum Program.
- The Leaf Vacuum program ensures that high risk areas like downtown and Churchville are not impacted further by a clogged drainage system during high intensity rain events.
- The Churchville area was added to the service area in 2022, after flooding in the area. The Leaf Vacuum
 Program was expanded to assist in mitigating the chances of any future flooding.



Current Program

- The City of Brampton, Public Works and Engineering Department, provides a Leaf Collection Program to specific city streets of the downtown core and the residential area of the city known as Churchville. The remainder of the city is serviced by the Region of Peel's Waste Collection Program.
- Property owners gather fallen leaves and place them along the roadside boulevard in front of their homes. The leaves are subsequently mechanically collected via vacuum units from the boulevard. The vacuum unit places the collected leaves into the back of an accompanying receptacle vehicle.
- Leaves that may fall onto the roadway are not collected through the leaf vacuum program, rather they are swept up by street sweeping machines through the City's Street Sweeping Program, which is intended to remove debris and potential blockages from storm catch basins.
- Each street within the designated vacuum area receives three passes within the six-week period (weather dependent).
- The 2024 Leaf Collection Program covers approximately 65 kms of curb line and collected and recycled approximately 275 tons of leaves between late October and early December.

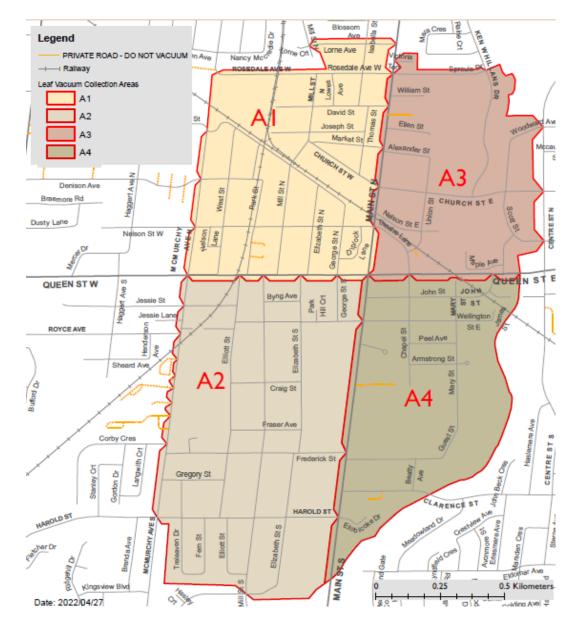


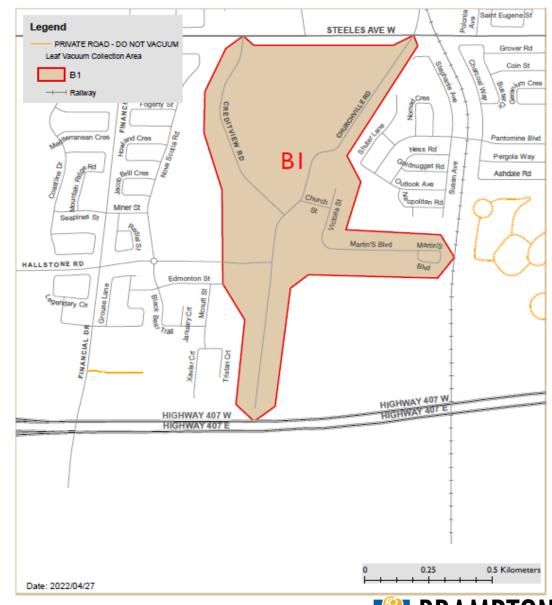
Benchmarking

	Mississauga	Oakville	Burlington	Brampton
Service Criteria	35+ years	25+ years	Age + Density	Downtown + Churchville
Service Area	~1800 kms	~1600 kms	~1000 kms	~65 kms
Service Model	~90% Contracted + 10% In-house	~90% In-house + 10% Contracted	In-house	Contracted
Service Level	2 Passes (All Areas)	1 Pass (North of QEW) 3 Passes (South of QEW)	1 Pass (all Areas)	3 Passes (All Areas)



Option #1 – (Current) Service Area







Option #1 – (Current) Cost

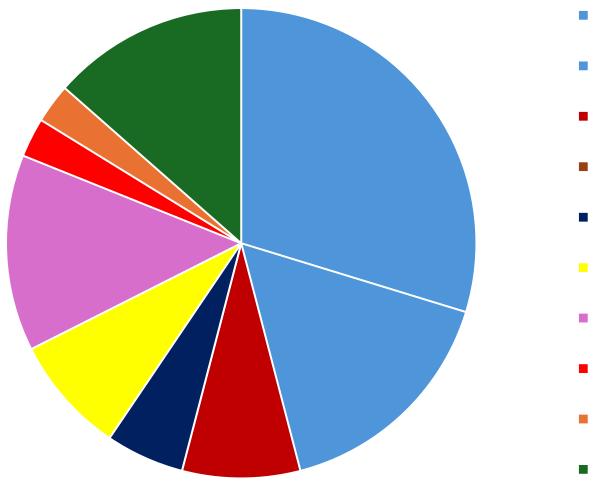
Option	Description	Curb-Line Length	Contracted Cost (2024)	Total In-House Cost (Estimated)
1	Status Quo (Current)	TOTAL = 65 kms	TOTAL = \$170K	~\$730K (upfront Capital equipment costs) + ~\$170K/year in Operating costs (fuel, parts, and labour*)

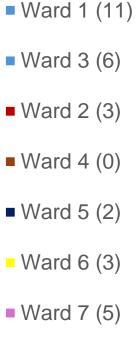
The Region of Peel provides a recycling recovery rate per tonne. The average budgeted recovery amount is approximately \$50K.



Option #2 - Considerations

Leaf Vacuum Service Requests - 2022-2024



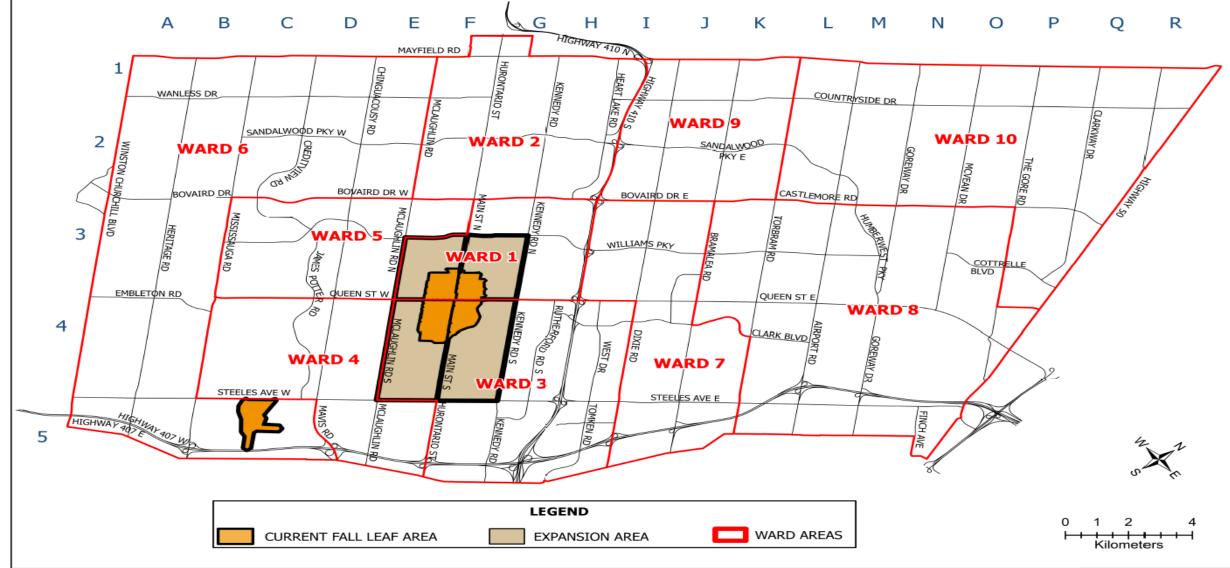


- Ward 8 (1)
- Ward 9 (1)
- Ward 10 (5)



Option Two Proposed Fall Leaf Expansion







Option #2 – Expanded Area

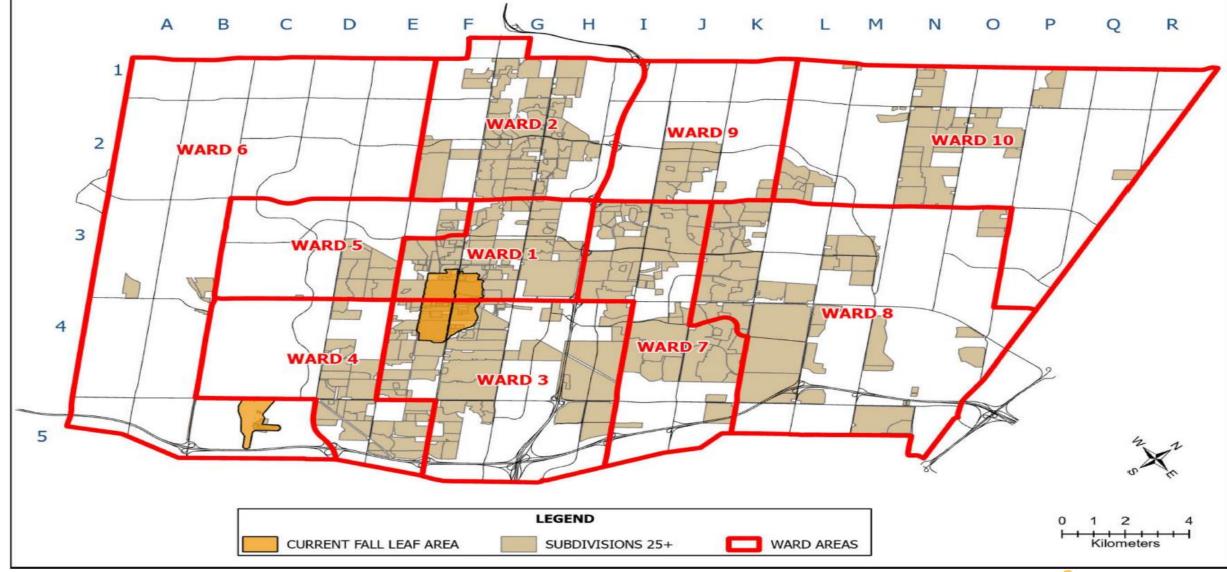
Option	Description	Curb-Line Length	Contracted Cost (Estimated)	Total In-House Cost (Estimated)
2	Expanded Area (Wards 1 & 3)	Current ~65 km + Additional ~145 km TOTAL = 210 km	Current \$170K + Additional \$380K TOTAL = \$550K	~\$2.4M (upfront Capital equipment costs) + ~\$550K/year in Operating costs (fuel, parts, and labour*)

The Region of Peel provides a recycling recovery rate per tonne. The average budgeted recovery amount is approximately \$50K.



Possible Expansion of City Leaf Collection Program







Option #3 – All Mature Areas

Option	Description	Curb-Line Length	Contracted Cost (Estimated)	Total In-House Cost (Estimated)
3	" Mature" Areas (25+ Years Old)	Current ~65 km + Additional ~1,385 km TOTAL = 1450 km	Current \$170K + Additional ~\$3.6M TOTAL = \$3.8M	~\$16.3M (upfront Capital equipment costs) + ~\$3.8M/year in Operating costs (fuel, parts, and labour*)

The Region of Peel provides a recycling recovery rate per tonne. The average budgeted recovery amount is approximately \$50K.



Option #3 – Cost per Ward

WARD	KMS	COST (\$000's)
1	185	\$481
2	240	\$624
3	200	\$520
4	185	\$481
5	100	\$260
6	5	\$13
7	260	\$676
8	130	\$338
9	70	\$182
10	95	\$247
TOTAL	1470*	\$3,822

*1470 kms indicated due to compounded rounding from each Ward



Option Summary

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Staff are recommending that Council proceed with Option 1, as there is an absence of available funding within the Public Works and Engineering budgets to cover additional service costs.



Thank you!

